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American Petroleum Institute
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Washington, D.C. 20005

Monthly Statistical Report

Finance, Accounting, and Statistics Department

Vol. 18, No. 5
MAY 1994

SUMMARY

Growth in total petroleum deliveries continued to strengthen in May. The month's 4.4 percent increase reflected, in particular, the effects of reasonably healthy economic growth on demand for highway fuels. Gasoline deliveries, roughly tracking estimated consumption, rose 2.3 percent over last May's level. Distillate deliveries' unusually large increase of 10.8 percent, even after accounting for the effects of unseasonably cold weather in the Eastern U.S. and other factors, still incorporated underlying consumption growth for that fuel on the order of 4 percent..

Kerosine jet fuel deliveries also rose in May, by nearly 5 percent. However, this growth came essentially at the expense of naphtha jet, which declined by nearly the same 63 thousand B/D that kerosine jet fuel increased and mainly reflected the military's ongoing conversion to kerosine-based jet fuel. Residual fuel oil deliveries, too, had little to contribute to May's year-to-year increase in petroleum deliveries. Though not declining as substantially as in April, in May they still fell slightly short of year-ago levels.

Overall domestic crude oil production, despite a slight year-to-year gain for Alaskan crude, still fell 3.2 percent or about 220 thousand B/D in May. For the lower 48, crude oil production fell 4.2 percent. Natural gas liquids production appears to be recovering gradually from its dropoff late last year, but in May still fell slightly short of year-ago levels.

Total petroleum imports rose 5.5 percent in May versus one year earlier. More than half of the half-million B/D increase the result of a surge in product imports, which jumped 16 percent from a year ago to 2.15 million B/D. Gasoline imports, in particular, at 450 thousand B/D, reached their highest monthly level in three years.

Spirited refinery activity in May put input to distillation units up by nearly 2 percent over a year ago. As a result, utilization of reported capacity reached 95.3 percent, up more than 2 points from a year ago and its highest level in at least twenty years. Output slates continued to favor distillate and kerosine jet fuel over gasoline and resid.

Total inventories continued to rise less than seasonally in May, with an ending level roughly 45 million barrels below average for the month. At 1,015 million barrels, total inventories reached their lowest May level in eight years. Month-end crude oil stocks alone were about 25 million barrels below average for May, down more than 7 million barrels from April's level at 330 million barrels. Gasoline inventories, however, ended the month within the typical May range, and distillate stocks were roughly 10 million barrels above recent years' experience.

PRODUCT SUPPLIED

Gasoline

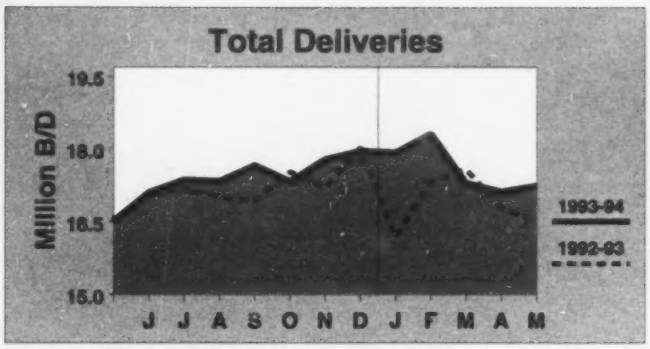
THE ECONOMY BOOSTS DEMAND FOR GASOLINE... More or less tracking the estimated growth in consumption, deliveries of motor gasoline rose 2.3 percent in May. With disposable personal income in 1994 increasing at a rate of 3-4 percent, year to year, compared with less than 2 percent last year, improved economic growth appears to be contributing to this year's stronger gasoline demand. Greater demand has translated into higher deliveries of low-RVP product as well. Although the low-RVP season does not begin until June 1 for consumers, preparations by refiners and distributors have already been in the works for several months. Low-RVP gasoline, defined as 7.8 psi for southern ozone non-attainment areas and 9.0 psi elsewhere, was to be at terminals by May 1 and available at retail by June 1.

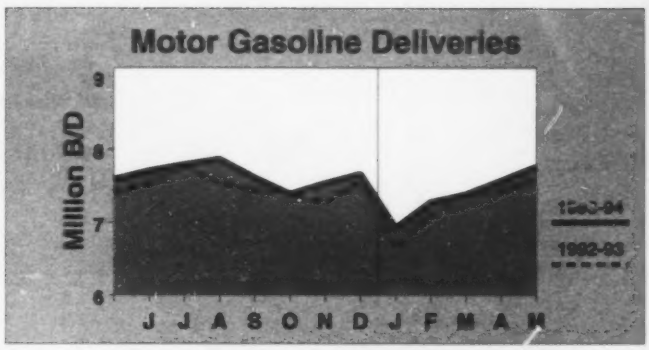
Data on miles traveled finally seem to be falling into line with the strengthening in gasoline demand growth. Following a weather-related decline in January, March's greater than 5 percent increase was more than enough to offset a still-weak February, which had been revised downward to a less than 2 percent rise. If anything, March's increase in travel, the greatest year-to-year increase in over two years, was a bit stronger than expected. We estimate that travel in April and May averaged 3-4 percent ahead of a year ago.

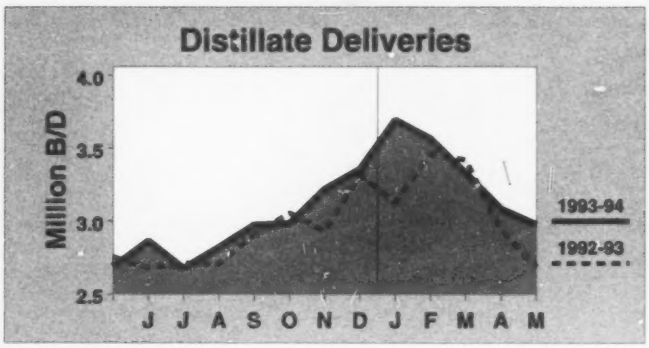
API ESTIMATES

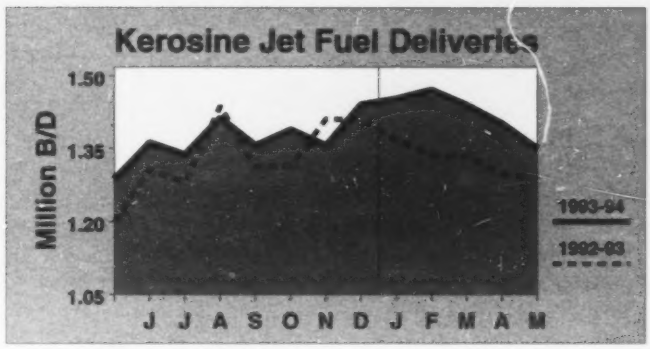
	MAY		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	17.2	4.4	17.6	4.1
Crude production	6.6	(3.2)	6.7	(3.5)
Total imports	9.1	5.5	8.6	3.0
Stocks (million bbl)	1,016	(4.9)	na	na

Published June 15, 1994









Distillate Fuel Oil

...AND FOR DIESEL.

The surprisingly large, nearly 11 percent increase in distillate fuel oil deliveries in May was partly due to unseasonably cold weather and data anomalies. But, even after accounting for these, there remained substantial underlying growth in consumption. Beneath the month's large increase was an estimated underlying consumption trend of around 4 percent attributable largely to transportation demand. Highway demand is estimated to have grown 4 to 5 percent in May and rail traffic has been rising at a similar rate.

Part of the unusual size of May's deliveries increase was attributable to the cold snap in late May in the East and Midwest. The cold weather set new records for daily lows in some regions and there were even reports of snow in Maine. Nationally, heating degree days averaged roughly 40 percent colder than one year earlier—enough, even in May, to give rise to heating demand in regions which normally have little if any such needs this late in the season. We estimate this boosted the year-to-year comparison for total distillate deliveries by 2-3 percent. Finally, deliveries last May were around 100 thousand B/D below trend, serving to exaggerate the year-to-year increase this year by another 3-4 percent.

Kerosine Jet Fuel

NAPHTHA JET'S DROP OFFSETS GAIN FOR KEROSINE JET.

Kerosine jet fuel deliveries, taken alone, rose 4.9 percent for May—but the rise was entirely attributable to the ongoing military conversion from naphtha jet fuel. Naphtha jet deliveries fell to a new low for the month of only 47 thousand B/D, less than half the 113 thousand B/D level of a year ago. Although the inland and Rocky Mountain areas remain to be converted over the next year and a half, the changeover to JP-8 in the Eastern/Gulf Coast region, due to be largely completed early June, has eliminated much of remaining naphtha jet demand. The switch began only last year in the U.S., but was started overseas with a conversion for U.K. operations in 1979.

Meanwhile, air traffic has continued to grow—but not in terms of aircraft miles or fuel consumption. Revenue passenger miles have been rising at about a 3 percent rate, but increased load factors have kept aircraft miles flat or even down slightly.

Residual Fuel Oil

STILL FALLING SHORT OF YEAR-AGO LEVEL.

Deliveries of residual fuel oil strengthened somewhat in May versus April. Nevertheless, though they did not decline at the double-digit rate experienced in April, May's resid deliveries still fell slightly short of year-ago levels. The experience of the past two months contrasts with earlier in the year, when substitution from natural gas and weather-induced electric utility demand caused deliveries to jump by 20 percent or more.

May's unseasonably cold weather did not have as much influence on utility usage as it might have in mid-winter. Since residual fuel oil serves in an incremental role more than that of a base-load fuel, off-season surges in electricity demand are less likely to call into play additional resid-fired generation. In fact, May has traditionally been one of the lowest months of the year for resid usage at electric utilities. Furthermore, with respect to relative BTU costs, the balance in May still appeared to be tilted towards resid over gas for electric utilities and others with switching capability. But with resid prices rising and gas prices slipping, resid's advantage was eroding rapidly.

Other Oils

DELIVERIES RISE NEARLY 7 PERCENT.

Deliveries of "other oils" rose an estimated 6.7 percent for May—outside of their weather-related jump in January, their largest gain so far this year. For the year to date, deliveries of "other oils" were up 4.9 percent.

First quarter data from the Department of Energy confirm that a substantial portion of the first quarter's 4.6 percent rise in deliveries was weather-related. Roughly 80 percent of the January-March increase in deliveries took place in the LPGs, particularly early in the quarter, when severe cold gripped the Eastern U.S. More recently, various data suggest that petrochemical feedstock demand, particularly for gasoil, has contributed to the deliveries increase for "other oils". Ethane for chemical feedstock use, however, has reportedly been weaker.

SUPPLY

Production

ALASKAN OUTPUT RISES SLIGHTLY, BUT TOTAL FALLS.

Alaskan production surpassed year-ago levels for only the second time this year in May, but just barely. Output there averaged 1.57 million B/D, up about 5 thousand B/D from year-ago levels. Various technical problems earlier in the year had sporadically hindered operations. Nevertheless, year-to-date Alaskan crude production is off only about 30 thousand B/D or 2 percent, compared with previous declines running around 100 thousand B/D per year or so.

Lower 48 output continued to drop, taking the U.S. total with it. Production outside Alaska fell over 220 thousand B/D, or 4.2 percent. For the U.S. as a whole, production dropped by 3.2 percent.

Meanwhile, natural gas liquids production—which now, with the decline in crude, accounts for roughly a fifth of all domestic liquids output—appears to be recovering some of the ground it lost late last year and earlier this year. Growth in the production of NGLs (liquefied petroleum gases and other petroleum compounds extracted from natural gas streams) had been running more than 4 percent ahead of the year-ago period through last October. But, in late 1993 and early 1994, higher gas prices, combined with the slide in oil prices, impaired extraction economics and cut NGL output. NGL extraction rates, which had been running at around 1.75 million B/D through last fall, fell to less than 1.60 million B/D in December.

Since then gas prices have softened and oil prices have trended upwards, reducing their value as part of the natural gas stream and increasing their value as extracted petroleum products. As a result, NGL output has risen to an estimated 1.725 million B/D for May, but was still off slightly from a year ago.

Imports

PRODUCTS UP BY 16 PERCENT.

Rising 5.5 percent versus one year earlier in May, 300 thousand B/D of petroleum imports' 475 thousand B/D increase was the result of a surge in product imports. As has been the case earlier this year, growth in actual imports has understated the underlying need for imports because of greater-than-usual supplies being drawn from domestic stocks or smaller-than-usual inventory builds. If adjusted for differences in inventory patterns this year versus last, the growth in imports in May would have been more than 11 percent.

Product imports in May jumped 16 percent from a year ago to 2.15 million B/D. For the year to date, product imports have averaged 2.05 million B/D, their highest level for a similar period since 1990. Accounting in May for more than a third of the roughly 300 thousand B/D year-to-year gain were gasoline imports, which rose 40 percent to 450 thousand B/D—their highest monthly level in three years.

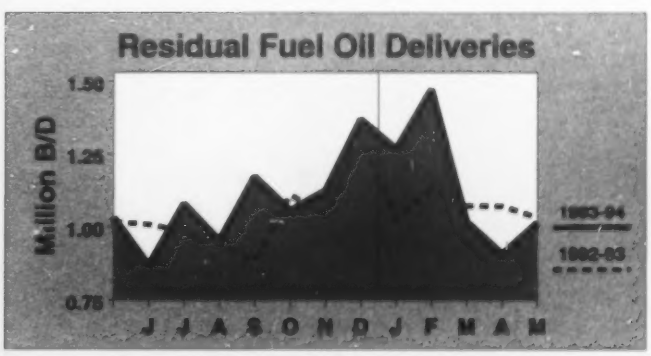
The higher level of gasoline imports of the past several months reflects an economically attractive price differential versus European sources. The latest definitive import data by source, which run through March, illustrate these developments. Between January and March, imports from the Americas (the Virgin Islands, Canada, Venezuela, and others) rose modestly, from about 190 thousand B/D to 225 thousand B/D. But imports from a diversity of European sources surged from a mere 15 thousand B/D to over 160 thousand B/D because of lower prices across the Atlantic compared with the U.S. As a result, total finished gasoline imports jumped from 206 thousand B/D in January to 387 thousand B/D in March. Relative price data indicate that this advantage continued in May.

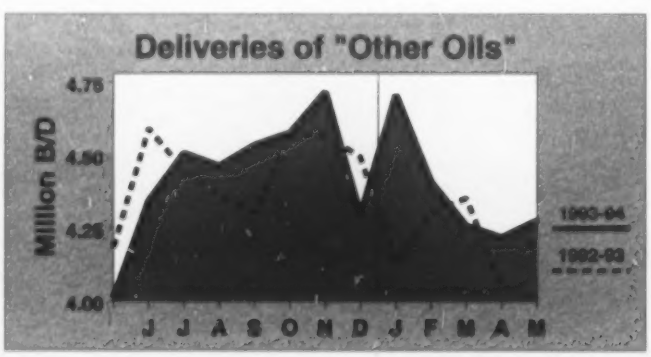
Distillate imports for May rose 38 thousand B/D from a year ago to 191 thousand B/D, and imports of kerosine jet fuel increased 21 thousand B/D to 88 thousand B/D. Imports of residual fuel oil rose 70 thousand B/D to 386 thousand B/D.

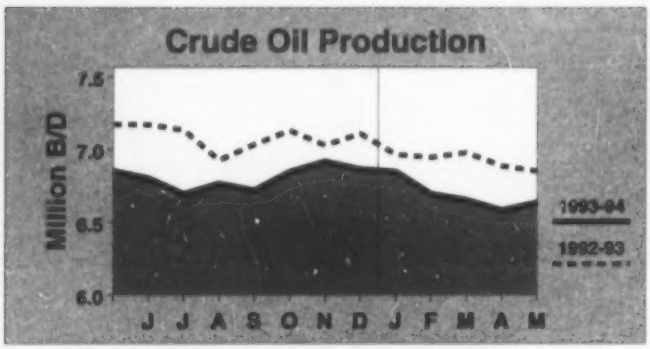
Refinery Operations

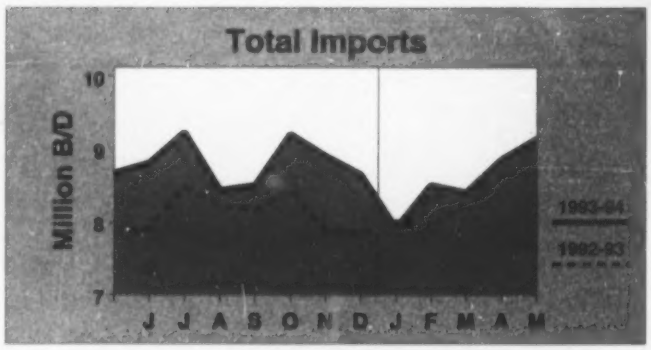
UTILIZATION REACHES A RECENT-YEAR HIGH.

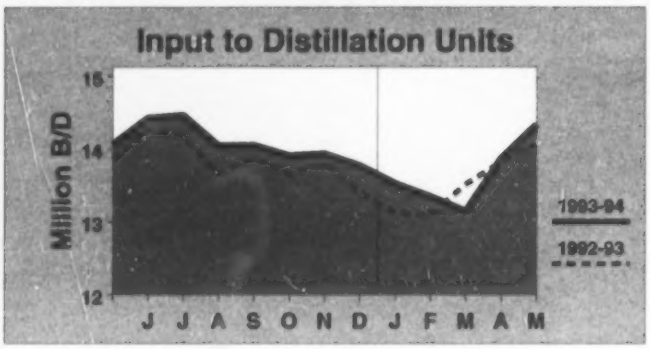
Spirited refinery activity in May put input to distillation units up by nearly 2 percent over a year ago, to 14.33 million B/D. As a result, utilization of reported capacity reached 95.3 percent, up more than 2 points from a year ago and its highest level in at least twenty years.

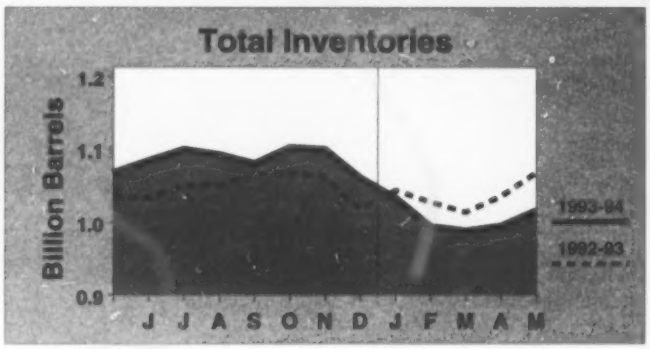












Output slates continued to lean towards middle distillates, with distillate production up over 13 percent, and kerosine jet fuel, 7.1 percent. Gasoline production was only flat versus a year ago, following April's year-to-year increase—but was still stronger than the 4.3 percent decline in output for the first quarter. With the decline in residual fuel oil deliveries for the month and the rise in imports, domestic production of residual fuel oil dropped nearly 11 percent versus last May.

Inventories

CRUDE OIL KEEPS TOTAL STOCKS LOW.

Continuing April's pattern, total petroleum inventories in May again rose less than seasonally. The 21 million barrel increase since the end of April was only about two-thirds the roughly 30 million barrel average rise for that month in recent years. As a result, total inventories amounted to only 1,015 million barrels at the end of the month—their lowest May level in eight years and about 45 million barrels below the recent-year average for the month. Stocks of unfinished oils, down 13 million barrels from their recent-year average for May, accounted for part of May's lower inventory level, but the bulk of the difference was due to crude oil stocks.

Crude oil stocks ended the month about 25 million barrels below average for May, falling more than 7 million barrels to 330 million barrels. Although this is no lower than the 330-338 million barrel range experienced so far this year, crude oil stocks' pattern this year contrasts with their more typical behavior. On average, crude oil stocks have risen about 30 million barrels over the first five months of the year.

Gasoline inventories dropped marginally to just over 216 million barrels, in the middle of the roughly 210-225 million barrel recent-year range for May. In recent years, gasoline inventories have fallen as often as they have risen during May. In fact, gasoline inventories have typically declined by 10 to 20 million barrels throughout the spring from their seasonal high in January or February.

Distillate inventories rose 9 million barrels during May, the increase nearly evenly split between low-and high-sulfur product. The reduced flexibility of storage necessitated by product segregation no doubt contributed to a higher distillate stock level at the end of May compared with recent years. At 113 million barrels, distillate stocks were roughly 10 million barrels higher than the 100-104 million barrels for May of the previous three years.

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ESTIMATED UNITED STATES PETROLEUM BALANCE[1]
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	May			Year-to-Date		
	1994[2]	1993[3]	% Change	1994[4]	1993[3]	% Change
Disposition:						
Total motor gasoline	7,759	7,585	2.3	7,379	7,233	2.0
Finished oxygenated	905	834[E]	8.5	1,629	1,494[E]	9.0
Finished reformulated	0	na	na	0	na	na
Finished other	6,854	6,751[E]	1.5	5,750	5,739[E]	0.2
Naphtha-jet	47	113	(58.4)	58	115	(49.6)
Kerosine-jet	1,351	1,288	4.9	1,423	1,326	7.3
Distillate fuel oil	2,976	2,685	10.8	3,327	3,123	6.5
≤ 0.05 percent sulfur	1,795	311[E]	477.2	1,708	361[E]	373.1
> 0.05 percent sulfur	1,181	2,374[E]	(50.3)	1,619	2,762[E]	(41.4)
Residual fuel oil	1,015	1,033	(1.7)	1,131	1,066	6.1
All other oils (including crude losses)	4,276	4,009	6.7	4,373	4,167	4.9
Reclassified[5]	-193	-206	na	-131	-164	na
Total domestic products supplied	17,231	16,507	4.4	17,560	16,866	4.1
Exports	960	1,082	(11.3)	945	1,058	(10.7)
Total disposition	18,191	17,589	3.4	18,505	17,924	3.2
Supply:						
Domestic liquids production:						
Crude oil (including condensate)	6,628	6,847	(3.2)	6,676	6,921	(3.5)
Natural gas liquids	1,725	1,732	(0.4)	1,673	1,768	(5.4)
Other supply[6]	1,388	1,397	(0.6)	1,298	1,258	3.2
Total domestic supply	9,741	9,976	(2.4)	9,647	9,947	(3.0)
Imports:						
Crude oil (excluding SPR imports)	6,988	6,809	2.6	6,512	6,511	0.0
From Canada	920	874	5.3	949	798	18.9
All other	6,068	5,935	2.2	5,563	5,713	(2.6)
Products	2,150	1,854	16.0	2,049	1,799	13.9
Residual fuel oil	386	316	22.2	427	354	20.6
All other	1,764	1,538	14.7	1,622	1,445	12.3
Total imports	9,138	8,663	5.5	8,561	8,310	3.0
Total supply	18,879	18,639	1.3	18,208	18,257	(0.3)
Stock change, all oils	+688	+1,050	na	-297	+333	na
Refinery Operations:						
Input to crude distillation units	14,329	14,062	1.9	13,655	13,528	0.9
Operable capacity	15,040	15,151	(0.7)	15,051	15,135	(0.6)
Refinery utilization[7]	95.3	92.8	na	90.7	89.4	na
Crude oil runs	14,172	13,829	2.5	13,459	13,280	1.4

	May 1994	April 1994	May 1993	% Change From Month Ago	% Change From Year ago
Stocks (at month-end, in millions of barrels):					
Crude oil (excluding SPR stocks)	330.1	337.6	352.9	(2.2)	(6.5)
Unfinished oils	97.5	99.6	104.1	(2.1)	(6.3)
Total motor gasoline	216.5	217.0	224.8	(0.2)	(3.7)
Finished oxygenated	3.1	5.6	7.7	(44.6)	(59.7)
Finished reformulated	0.0	0.0	na	na	na
Finished other	175.6	171.5	179.1	2.4	(2.0)
Blending components	37.8	39.9	38.0	(5.3)	(0.5)
Naphtha-jet	2.0	1.6	4.2	25.0	(52.4)
Kerosine-jet	40.5	36.9	38.5	9.8	5.2
Distillate fuel oil	113.3	104.0	102.8	8.9	10.2
≤ 0.05 percent sulfur	59.6	55.2	12.2	8.0	388.5
> 0.05 percent sulfur	53.7	48.8	90.6	10.0	(40.7)
Residual fuel oil	39.1	40.5	43.1	(3.5)	(9.3)
All other oils	176.5	157.0[R]	197.0	12.4	(10.4)
Total all oils	1,015.5	994.2[R]	1,067.4	2.1	(4.9)

1—Total supply, i.e., production plus imports adjusted for net stock change is equal to total disposition from primary storage. Total disposition from primary storage less exports equals total domestic products supplied. Information contained in this report is derived from information published in the API *Weekly Statistical Bulletin* and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions. **2**—Based on API estimated data converted to a monthly basis. **3**—Source: U.S. Energy Information Administration (including any adjustments). **4**—Data for most current two months are API estimates. Other data come from U.S. Energy Information Administration (including any adjustments). **5**—An adjustment to avoid double counting resulting from differences in product classifications among different refineries and blenders. **6**—Includes unaccounted-for crude oil, withdrawals from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol, and downstream blending of ethanol. **7**—Represents "input to crude oil distillation units" as a percent of "operable capacity". **R**—Revised. **E**—Estimated. **na**-Not available.